

CLAIMS

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1. A packaging architecture system for a transceiver comprising:
a forward vertical carrier having an optical converter;
a stiffener block, the stiffener block oriented about 90 degrees from
the forward vertical carrier; and
a flexible cable electrically connecting the optical converter of the
forward vertical carrier to a solder ball array aligned with the stiffener block.
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2. The system of claim 1 wherein the optical converter is at least one
laser.
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3. The system of claim 1 wherein the optical converter is at least one
photodetector.
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4. The system of claim 1 further comprising an electronic component
die thermally connected to the forward vertical carrier.
5. The system of claim 1 further comprising an electronic component
die thermally connected to the stiffener block.
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6. The system of claim 1 further comprising a heat sink thermally
connected to the forward vertical carrier and the stiffener block.

7. A packaging architecture system for a transceiver comprising:
first means for supporting an optical converter;
second means for supporting an electrical connection, the second
5 supporting means oriented about 90 degrees from the first supporting means;
and
means for electrically connecting the optical converter and the
electrical connection.

10 8. The system of claim 7 wherein the optical converter is at least one
laser.

9. The system of claim 7 wherein the optical converter is at least one
photodetector.

15 10. The system of claim 7 further comprising an electronic component
die thermally connected to the first supporting means.

20 11. The system of claim 7 further comprising an electronic component
die thermally connected to the second supporting means.

12. The system of claim 7 further comprising means for removing heat
thermally connected to the first supporting means and the second supporting
means.

13. The system of claim 7 further comprising means for removing heat, the heat removing means having a heat sink vertical portion and a heat sink horizontal portion, the heat sink vertical portion being attached to the second supporting means and the heat sink horizontal portion being attached to the second supporting means.

14. A packaging architecture system for a transceiver comprising:
a heat sink, the heat sink having a first surface and a second surface, the first surface being oriented about 90 degrees from the second surface;

a forward vertical carrier having an optical converter, the forward vertical carrier being attached to the first surface of the heat sink;

a stiffener block, the stiffener block being attached to the second surface of the heat sink;

a rearward horizontal I/O block, the rearward horizontal I/O block being attached to the stiffener block; and

a flexible cable electrically connecting the optical converter of the forward vertical carrier to a solder ball array aligned with the stiffener block.

15. The system of claim 14 wherein the optical converter comprises at least one laser.

16. The system of claim 14 wherein the optical converter is at least one photodetector.

17. The system of claim 14 further comprising an electronic component die thermally connected to the forward vertical carrier.

5 18. The system of claim 17 wherein the electronic component is selected from the group consisting of a laser drive amplifier and a transimpedance amplifier.

10 19. The system of claim 14 further comprising an electronic component die thermally connected to the stiffener block.

15 20. The system of claim 19 wherein the electronic component is selected from the group consisting of a receiver post amplifier and an eeprom.